

13.10 - 16.10.2023

Job Card No. RDKL/2324/WW/J00063

Sample Requisition No. RDKL/WW/2324/SR00023

Sample code: RDKL/2324/WW/00237 (2324/RDKL/WW/WW/L00032)

RDKL/2324/WW/00238 (2324/RDKL/WW/WW/L00033)

RDKL/2324/WW/00239 (2324/RDKL/WW/WW/L00034)

RDKL/2324/WW/00240 (2324/RDKL/WW/WW/L00035)

Allocation Date: 13/10/2023

Due Date: 30.10.2023

Parameter: BOD

Test material: Water

Name of supervisor: Sh. A. Rafique

Standardization of Sodium Thiosulphate (Initial)

Normality of $KIO_3$ (N)	Vol. of $KIO_3$ (ml)	Vol. of $Na_2S_2O_3$ (ml)	Normality $Na_2S_2O_3$ (N)
0.0125 (N)	10 ml	5.0 ml	0.025 (N)
0.0125 (N)	10 ml	5.0 ml	0.025 (N)
0.0125 (N)	10 ml	5.0 ml	0.025 (N)
		<u>5.0 ml</u>	<u>0.025 (N)</u>

Sample code	Dilution	Initial DO mg/L	Final DO mg/L	Avg. Final DO mg/L
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L00032	100 D 12 → 1200 ml	(A) $6.9 - 0 = 6.9$ $\approx 6.9$ mg/L	(B) $4.3 - 0 = 4.3$ $\approx 4.3$ mg/L	} 4.35 mg/L
			(C) $8.7 - 4.3 = 4.4$ $\approx 4.4$ mg/L	

Result:  $(6.9 - 4.35) \times 100 = \underline{255}$  mg/L (660) ✓

L00033	24 D 50 → 1200 ml	(A) $13.7 - 6.9 = 6.8$ $\approx 6.8$ mg/L	(B) $14.1 - 8.7 = 5.4$ $\approx 5.4$ mg/L	} 5.4 mg/L
			(C) $19.5 - 14.1 = 5.4$ $\approx 5.4$ mg/L	

Result:  $(6.8 - 5.4) \times 24 = 33.6 \approx \underline{34}$  mg/L (160) ✓

Sample code	Dilution	Initial DO mg/L	Final DO mg/L	Avg Final DO mg/L
100034	24D 50 → 1200 ml	(A) 20.6 - 13.7 = 6.9 ≈ 6.9 mg/L	(B) 24.7 - 19.5 = 5.2 ≈ 5.2 mg/L  (C) 30.0 - 24.7 = 5.3 ≈ 5.3 mg/L	5.25 mg/L

Result:  $(6.9 - 5.25) \times 24 = 39.6 \approx \underline{40 \text{ mg/L}} \text{ (164)}$

100035	12D 100 → 1200 ml	(A) 27.5 - 20.6 = 6.9 ≈ 6.9 mg/L	(B) 35.1 - 30.0 = 5.1 ≈ 5.1 mg/L  (C) 40.4 - 35.1 = 5.3 ≈ 5.3 mg/L	5.2 mg/L
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Result:  $(6.9 - 5.2) \times 12 = 20.4 \approx \underline{20 \text{ mg/L}} \text{ (88)}$

### Standardization of Sodium Thiosulphate (Final)

Normality of $KIO_3$ (N)	Vol. of $KIO_3$ (ml)	Vol. of $Na_2S_2O_3$ (ml)	Normality of $Na_2S_2O_3$ (N)
0.0125 (N)	10 ml	5.0 ml	0.025 (N)
0.0125 (N)	10 ml	5.0 ml	0.025 (N)
0.0125 (N)	10 ml	5.0 ml	0.025 (N)
		<u>5.0 ml</u>	<u>0.025 (N)</u>

Ta. Ts. Sr

Dr. M. S.  
20.10.23